

0081-PP

An example occurs in the plastics industry where a polymer film is generated by blown film production methods and wound on a cardboard or fibrous core. Rolls of film can be produced wherein, for example, 1,500 linear feet or more of film is wound into a single roll of film. The roll of film can then be shipped to a plastic bag manufacturer. The plastic bag manufacturer can subsequently print the film and produce bags from the film.

Increased operating speeds of continuous web systems led the industry to adopt turret-type centerwinders. Turret-type centerwinders commonly incorporate two or more shafts mounted to a rotatable turret assembly. The turret has a winding position and an unloading position. The turret revolves to place a core into the feed of a web material while simultaneously positioning the full roll in a position for unloading or removal from the turret.

Turret-type centerwinders include a lay-on roll to smooth the film and meter or remove air between layers of film. Such centerwinders have additional mechanisms to automate the web transfer from a full roll to a new core. Shortcomings of these "turret winders" include (1) extra equipment complexity and higher equipment costs, (2) the winding shafts located on a rotatable turret impede the transfer of the web and roll stability, and (3) inherent difficulties in unloading and recoring a shaft located on a rotatable turret.

U.S. Patent Number 2,256,082 to Feurt discloses a paper converting machine. This early example of a winding device